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LEASON, David
Darby & Darby P.C.
Post Office Box 5257
New York, NY 10150-5257
ETATS-UNIS D'AMERIQUE

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Irongate Drive, Andover, MA 01810 (US). **SHAH, Dipen**
[IN/FR]; 65 Rue de la Republique, F-33400 Talence,
Bordeaux (FR).

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(74) Agents: **LEASON, David** et al.; Darby & Darby P.C., Post
Office Box 5257, New York, NY 10150-5257 (US).

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(71) Applicant (*for all designated States except US*): **C.R.
BARD, INC.** [US/US]; 730 Central Avenue, Murray Hill,
NJ 07974 (US).

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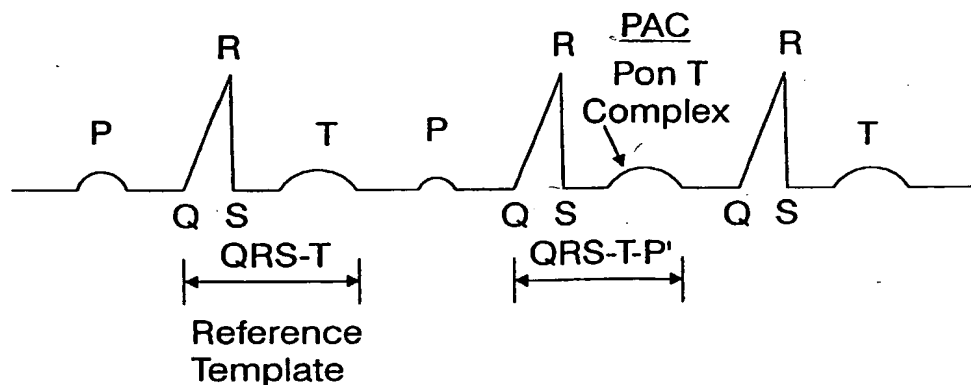
(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **MACADAM,
David, P.** [US/US]; 5 Cyndy Lane, Millbury, MA 01527
(US). **WANG, Paul, J.** [US/US]; 750 Washington Street,
Boston, MA 02111 (US). **YANG, Shawn** [US/US]; 6

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[Continued on next page]

(54) Title: TRACKING ECTOPIC BEATS OR DERIVING P-WAVES IN ELECTROCARDIAC SIGNALS HAVING SUPERIM-
POSED COMPLEXES



(57) Abstract: A system and compressor for tracking ectopic beats is disclosed wherein ECG data from multiple leads is acquired and a segment of said ECG signal is used as a reference template. The best fit between the reference template and the acquired data is determined using a correlation coefficient calculation. There is also disclosed a system and a processor for deriving a p-wave signal from a premature atrial contraction (PAC) beat in an ECG signal wherein ECG data is captured and processed so as to derive the p-wave signal from the PAC beat, thereby obtaining information on the p-wave in an ECG signal wherein the complexes partly overlap and obscure parts of the waveform.

WO 02/058550 A3

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/46348

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61B5/0452 A61B5/0468 G06F17/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61B G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	THRONE R D ET AL: "Use of tachycardia templates for recognition of recurrent monomorphic ventricular tachycardia" PROC. COMPUTERS IN CARDIOLOGY MEETING. JERUSALEM, SEPT. 19 - 22, 1989, WASHINGTON, IEEE COMP. SOC. PRESS, US, 19 September 1989 (1989-09-19), pages 171-174, XP010022102 ISBN: 0-8186-2114-1 cited in the application	1-3, 31, 32, 34-39
Y	the whole document ----- -/--	6, 42



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
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T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Jonsson, P.O.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/46348

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

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